

Title (en)
OFDMA and IFDMA radio communication

Title (de)
Funkkommunikation mit OFDMA und IFDMA

Title (fr)
Communication radio avec OFDMA et IFDMA

Publication
EP 1720369 A1 20061108 (DE)

Application
EP 06113115 A 20060426

Priority
US 67699905 P 20050502

Abstract (en)
The method involves utilizing a frequency band that is subdivided into number of sub carriers. Messages e.g. speech information, are transmitted from a base station to a subscriber station and from a subscriber station to the base station using frequency band. The messages are processed by utilizing orthogonal frequency division multiple access (OFDMA) and interleaved FDMA (IFDMA)-procedures. Independent claims are also included for the following: (1) a transmitter for a radio communication system (2) a receiver for a radio communication system.

IPC 8 full level
H04W 72/08 (2009.01); **H04W 88/06** (2009.01)

CPC (source: EP US)
H04L 1/0001 (2013.01 - EP US); **H04L 5/023** (2013.01 - EP US); **H04W 72/23** (2023.01 - EP US); **H04L 27/2601** (2013.01 - EP US); **H04W 72/0453** (2013.01 - EP US); **H04W 72/542** (2023.01 - EP US); **H04W 88/06** (2013.01 - EP US)

Citation (search report)

- [A] US 2004001429 A1 20040101 - MA JIANGLEI [CA], et al
- [A] US 2005034053 A1 20050210 - JACOBSEN ERIC A [US], et al
- [A] ZHONGREN CAO ET AL INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS: "Optimum subcarrier assignment for OFDMA uplink", CONFERENCE RECORD OF THE 37TH. ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS, & COMPUTERS. PACIFIC GROOVE, CA, NOV. 9 - 12, 2003, ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS, NEW YORK, NY : IEEE, US, vol. VOL. 1 OF 2. CONF. 37, 9 November 2003 (2003-11-09), pages 708 - 712, XP010702209, ISBN: 0-7803-8104-1
- [A] FILIPPI A ET AL: "Low complexity interleaved sub-carrier allocation in OFDM multiple access systems", VEHICULAR TECHNOLOGY CONFERENCE, 2004. VTC2004-FALL. 2004 IEEE 60TH LOS ANGELES, CA, USA 26-29 SEPT. 2004, PISCATAWAY, NJ, USA,IEEE, 26 September 2004 (2004-09-26), pages 1890 - 1893, XP010786966, ISBN: 0-7803-8521-7
- [A] SCHNELL M ET AL: "Application of IFDMA to mobile radio transmission", UNIVERSAL PERSONAL COMMUNICATIONS, 1998. ICUPC '98. IEEE 1998 INTERNATIONAL CONFERENCE ON FLORENCE, ITALY 5-9 OCT. 1998, NEW YORK, NY, USA,IEEE, US, vol. 2, 5 October 1998 (1998-10-05), pages 1267 - 1272, XP010314992, ISBN: 0-7803-5106-1
- [AP] FRANK T ET AL: "IFDMA - A Promising Multiple Access Scheme for Future Mobile Radio Systems", PERSONAL, INDOOR AND MOBILE RADIO COMMUNICATIONS, 2005. PIMRC 2005. IEEE 16TH INTERNATIONAL SYMPOSIUM ON BERLIN, GERMANY 11-14 SEPT. 2005, PISCATAWAY, NJ, USA,IEEE, 11 September 2005 (2005-09-11), pages 1214 - 1218, XP010926614, ISBN: 978-3-8007-29

Cited by
US2010067591A1; US8913672B2; WO2010030941A3; US9735920B2; US10033500B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1720369 A1 20061108; EP 1720369 B1 20080827; AT E406773 T1 20080915; CN 1859633 A 20061108; DE 502006001421 D1 20081009; US 2007060161 A1 20070315; US 7742767 B2 20100622

DOCDB simple family (application)
EP 06113115 A 20060426; AT 06113115 T 20060426; CN 200610084151 A 20060430; DE 502006001421 T 20060426; US 41543506 A 20060502